

Patent application of

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for

**COMBINATION LIFTING, PLATFORM, HANDTRUCK, SCAFFOLD,
FLOORJACK AND MECHANIC' CLEEPER**

RELATED APPLICATION

Reference is made to my provisional application no. 60/228577
File 8/29/2000 entitled "combination lifting and card"

BACK GROUND OF INVENTION

Field of invention

This invention relates in general to a multi-use portable lifting, and more specifically, the invention discloses how a portable lifting can be convert into a tilt back hand truck, a regular hand truck, a scaffold, a floor jack or a mechanic' cleeper.

Description of prior art

Various combination of lifting and moving devices have been known in the past.

U.S. patent 4,258,826 to Murray, disclosing a hand cart that can be convert to stepladder and further disclosing a winch type that can raise a load to a higher level

U.S. patent 3,751,058 to Lasen discloses a combination show shovel, wheel barrow and dolly.

U.S. patent 6,173, 881 to Dean Tonabene, discloses combination hand truck, stepladder and basket carrier.

U.S. patent 6,189,653 to Laug Horst discloses multi-purpose scaffold.

U.S. patent 4,949,626 to Dale a. ast discloses combination stepladder and hand truck apparatus.

U.S. patent 4,488,326 to Chales w. chery, discloses pallet dock lift.

What is needed is a combinations lifting, platform, tilt back hand truck, scaffold, floor jack and mechanic' cleeper. None of the above patent describe the present invention.

Objects and advantages

- (a) One object of this invention is to provide a combination lifting, platform, tilt back hand truck, work buget, scaffold and mechanic's creeper apparatus which is readily convertible from a compact lift table structure into a rigid multipurpose tool structure.
- (b) To provide the combination of tool simple inexpensive to manufacture, operate and maintain.
- (c) To provide a closure which can be use by consumers, without special tools or training.
- (d) To provide a tool that can complete work from start to finish with out the need for transfer the load from one device to another that may cause injury.
- (e) To provide a closure which can be achieved by consumers without the use of a big vehicle to delivery a load because this invention is compact and light weight, using only a small amount of storage compared to the previous product, this invention can help consumers and business' save money which would other wise be spent on the high cost of gasoline.
- (f) A combination which all the load are rested on extensible tilter device and front scissor legs when the lift table elevate then the load will rested on scissor legs which provide different function from previous invention.
- (g) Another object of this invention is having a new and novel is to provide a combination lift table, tilt-back and hand truck which can be delivered from the ground both load and combination lifting platform it self to different level such as truck with out using high cost dock ,fork lift by converted and transfer weight from lift table position to tilt-back six-wheeler (climb up) and continue moving the load all the way in side the truck bed where folk lift unable to reach.
- (h) A combination of support plate and approach ramp, providing a pivotally inserted support plate member which normally carries a load when used as a hand truck. It can move upward and lock in place providing a compact structure for storage. it can also be suspended and lowered to the ground, docked and used as a platform. Unlike the other previous product this mechanism can be used as a scaffold, work buget and be used as a creeper and floor jack.
- (I) Another advantage of this invention is the lift assembly mechanism can be folded for more compact and coupling to rear portion of the lift table provide the maximum lowest point to the ground also support plate in lower position and converted to platform make it possible to roll load in and out also when attach with hand crank pusher wheel the platform and support plate can move slidable beneath many stags of boxes in one pass.
- (j) It can be elevated to the desired high and used the support plate which pick up the load from the truck or dock.
- (k) To provide a lighter product in weight than what already known by using light weight.

swivel wheel which can be rotate and use as a stop instead of using lower frame assembly also the scissor legs are made of steel or aluminium square tube instead of heavy steel bare and using combination extend legs and reinforce legs only when need more strength for lifting on heavier load.

(l) Provided multiple function attachments which can be coupled, using the same coupling device such as pocket, brackets and locking pin.

(m) Multipurpose scaffold and stepladder provide lifting loads, tools, lumber, heavy loads and work in side or out side building. It is convenient when used with remote control and tilted parallel with the ceiling, roof, pole, or work place for more convenient with new function.

(n) A work buget is can be carries, liquid, rock and sand. it can be lower to the ground and roll in and out load also elevate tilting and dumping the load.

(o) Further objective and advantages is to mark it easier for the user to carry and transport cargo when the structure is in the hand truck usage.

(p) A mechanic' s creeper can be tilted enabling a labourer to work face down and closer to the work place. It can be elevated and lowered to accesses work place that are hard to reach.

(q) A mechanic's creeper work as seat supports a worker an upright or set tool box at the same time also elevate tool box at desire level for work condition.

(r) Other advance is the floor jack which load or unload automotive parts, large size spare tires, raise and align the vehicle at the same time.

(s) Supply's an incline for fast convenient loading and unloading with less effort.

(t) Using only a single lift drive to tilting, lifting lowering and declining with out additional hydraulic device or other drive/control devices.

(u) The combination available in different size and selection for different use.

Drawing figures

Fig. 1A is a side elevational view of the lift table in accordance with this invention shown in a lowered transport condition with a removable extensible bar attached on lower cross beam and platform;

Fig. 1B is a side elevational view of the lift table in an elevated position;

Fig. 1C is a left end view of the right shown in FIG.1A;

Fig. 1D is a left end view of the right shown in FIG.1B;

Fig. 1E is a removed sectional view of extensible bar and tilter device;

Fig. 1F is side view of manually hand crank lift assembly;

Fig. 1G is side view of hydraulic lift assembly;

Fig. 1H is a side view of the embodiment of Fig. 1G, showing a hydraulic lift assembly in a lowered position;

Fig. 1I is a top view of Fig. 1B in its elevated position;

Fig. 1J is an enlarged partial sectional view of the combination support plate and approach ramp also support plate channel taken along the line 1J--1J in Fig.1I;

Fig. 1K is an enlarged partial sectional view of the support plate channel locking mechanism take along the line 1K--1K in Fig. 1I;

Fig. 1L is an enlarged partial sectional view of the combination support plate approach ramp and support plate locking mechanism take along the line 1L--1L in Fig.1I;

Fig. 1M is an enlarged partial section view of the combination support plate approach ramp and support plate channel take along the line 1M--1M in Fig.1I;

Fig. 1N is a partial exploded perspective view of a combination extended legs and reinforce legs with wheel assembly;

Fig. 1O is a partial exploded perspective view of a combination extended legs and reinforce legs with cross beam;

Fig. 1P is an enlarged partial view of the swivel wheels assembly taking along the line 1P--1P in Fig. 1I;

Fig. 1Q is a sectional view of the swivel wheels assembly taking along the line 1Q--1Q in Fig. 1P;

Fig. 1R is an enlarged partial section view the pivot pin assembly taking along the line 0

IR--IR in Fig.1A;

Fig. 1S is a sectional view of the pivot pin assembly taking along the line IS--IS in Fig. 1R;

Fig. 1T is a is an enlarge partial sectional view similar to Fig. 1M except showing the support plate in lowered to the floor level;

Fig. 2A is a side view of the lift table in accordance with invention shown in a lowered. transport condition with a removable extensible bar attached on upper cross beam and platform cross beam;

Fig. 2B is a side elevtional view of the lift table in an elevated position;

Figs. 2C through 2F are side views of the lift table with a tilter device, showing use thereof;

Fig. 3A is a side view of the lift table shown in lowered to the floor level and lifting stackers;

Fig. 3B is a side view of the lift table in an elevated position;

Figs. 3C is side view of Hand crank pusher wheel;

Fig. 3D shown in the hand truck usage condition or standard two wheeler;

Fig. 4A is a side view of the lift table in use as a stepladder;

Fig. 4B is a side view of the lift table in use as a multi-purpose scaffold;

Figs. 5A and 5B are views of the lift table in use as a multi-purpose work buget;

Figs. 6A and 6B are side views of the lift table in use as a mechanic's creeper;

Fig. 6C and 6D are side view and topview of the lift table in use as a automotive floor jack;

Summery of invention

It is the object of present invention is to provide a combination lifting, platform, tilt back hand truck, scaffold, work buget, floor jack, and mechanic' creeper which, is readily convertible from a lift table into a tilt back hand truck, or readily convertible from a lift table in to scaffold or readily convertible from a scaffold to any of the above mentioned functions.

Another objective of the present invention is to provide pocket, bracket, extension legs, extensible bar and pin holes to couple to a variety of different devices to achieve different function results in an new product which provides a function that used both the lift table aspect and the modified or add on function aspect to provide results superior to the sum of using separate device to perform the two function when perform two function or more than two function, such as provide a tilt back hand truck which can be delivered from the ground both load and combination lifting platform it self to different level such as truck bed by converted and transfer weight from lift table position to support plate or tilt back six wheeler then convert to hand truck two wheeler and continue move the load all the way inside the truck bed all on the same modified lift table and without the need for transfer of the load from one device to another device. without additional hydraulic cylinders or other drive/control devices.

Description-Figs.1 to 6D

Figs.1B and 1D. depict a scissors-type hydraulically-driven or screw thread-driven, liftable 10 (Fig 1F-1H lift assembly will be described in more detail later). Two pair of scissors legs 15a, 15b, 15c, 15d, made of steel or aluminium tube are mounted at a first end, e.g., using pivot pin 16a, 16b, (between cross bare 42d) to both side of upper support frame 17a, 17b, and pivot to both front wheel 18a, 18b, (between cross bar 42c) to lower portion of the scissors legs the upper support frame include platform cross frame 17, a 17b, and deck 11. The opposite ends of the scissors are coupled to rollers 16c and 16d and swivel wheels assembly 18c, 18d, Fig.1P to lower portion of scissors legs as part of scissors motion describe below, are free to move along horizontal surfaces of wheel 18a, 18b, swivel wheels 18c, 18d, Fig.1P. the first pair of legs 15a, 15b pivotally coupled, defining a scissors pivot pin 12a, 12b (pivot axis) and the second pair of 15c, 15d are pivotally coupled at the same axis 12a or pin 12b, a drive or motive device such as a hand operated hydraulic pump or other control may be provided for extending or retracting the cylinder 13 and cylinder rod 14 other drive or motive device are screw thread -driven witch may be by hand cranks, power by electric hand drill or power by an electric or air. Energy for screw thread-driven may be provided from an on-board battery and /or from an electric power via a cable (not shown). optionally, a switch or other control may be provided such as remote control (not shown). In the depict embodiment, the cylinder 13 is pivotally coupled at one end to pivot pin 29 and the lift arm 23, extending between ball joint 26 and bracket 34d mounted at the center of cross bar 42b with connected to the scissors legs 15a, 15d and pivot pin 25 (pivot axis) mounted to lift arm 22 and pivotally coupled at the opposite end, to the cross bar 22, extending between ball joint 24 and bracket 34c are mounted at a center of lower cross bar connect to the scissors legs 15b, 15c and pivot pin 25 (pivot axis), when the hydraulic cylinder 13, rod 14 and support rod 27 are extended cause lift arms 22 and 23 to spread apart pushing the cross bare 42b and platform 10 upward in Fig.1B, 1D, 1G, and when the hydraulic cylinder 13 is retract cause the lift arm 23 to lowering the cross bar 41 and platform assembly to lower. Best seen in Fig.1H, 3A,

In the depicted embodiments of Fig.1A, 1B, the rear deck cross bar 41 attached to bracket 55a, 55b, by welded and extend is pivotally at one end to a rod 50 and extensible tilter device 40 by adjusting pin 54 inserted in holes 200a 200b 200c 200d and device 40 is rested on bracket 51 and attached by pin 53 to cross bare 42 the lower end of scissors legs 15B, 15C (1E) when the hydraulic cylinder 13 retract cause the front cross bar 43 (support plate channel) or pivot 16A, 16b (Fig1A) are mounted to the upper end of scissor legs 15B, 15C to tilted and lowered best seen in Fig.1 tilt-back-six wheeler position also when elevated the lift table 10 it's provide lifting and tilting at the same time also when lower the lift table provide tilting and lowered table 10. The lift table 10 can be used as a number of function, as a tilt back hand truck, as a inclined lift table as a portable loading dock and used as a transporting cart. The device can be used for load and unload boxes, plywood, glass, table and office partition also can be push by hand. The handrails 420a and 420b may be used for securing the load from falling best seen in Fig. 4B. To unloading the load from lift table 10 to van or truck adjust the extend rod 50 a little higher than van or truck to provide an inclined for deck 11 then release the securing deck pin 221 with attach to bracket 220 welded to crossbar 42b then unlock the support plate lock 61 kick the support plate and approach lamp 49 to lowered position so that it

rests on the van bed and move the load over the approach ramp from deck 10 to the van is using a minimum afforded and man power also when unload from van to lift table 10 adjust extend leg 72a, 72b, (Fig. 1N) higher than rear deck to provide an inclined then rests the support plate on the van bed or truck bed then move the load to lift table 10 and lower the lift table 10 convert to tilt-back position then lift cross bare 42a or step on support plate 49 and converted to hand truck position Fig. 3D then move load off support plate 49. off the support plate 49. The extensible tilter device 40 can be fold-in and fold-out between extend rod 50, micro adjust-stop pin 52 to preside height or angle, convert from tilt-back position to platform position (Fig A1), to provide an inclined quickly roll loads on and off, to use as a t-bar dolly bracket 44 also used as hand crank pusher wheel 48 (Fig. 3A), (Fig. 3C) electric pusher wheel (not shown)

In the embodiment of Fig. 1F The screw thread-driven lift assembly. The ball joint 38a is welded to the left portion of the support arm 32a and on the right side of support arm 32a is attached to the folding support arm 33 attach to hole 35 using bolt and nut 130a, 130b, on both side also attached to the stop pin 36a, 36b, in the slot 37a, 37b both side to permit movement configuration 33, possible restrained by stop pin 36 (32a, and 33 are the same axis) the support arm 32a is pivotally attached to right side of lift arm 32b by bolted and nut 34a, 34b, (pivot axis) and on the left side of lift arm 32b is welded to ball joint 38b. A nut 121 attached by welded it to upper center of the bracket 122 and pivotally attached to top edge both side of lift arm 32b using a bolt and nut 123a, 123b, 124a, 124b,. A single threaded shaft 39 is attached between nut 121 and hand crank gear assembly, when cranked 125a is rotated, cause the arm 32a 32b to spread apart and raise the lift table 10 or drawn together causes to lowered the table. The hand crank assembly included gear bracket 126 provided with coupling hole 131 for shaft 39 is attached with gear 129a by welded and holes 127a, 127b, provided for shaft 125b, is attached to gear 129b by welded also hand crank 125a is coupling to shaft 125b and joint 125c. the gear bracket is attached between top edge of the folding support arm 33 to holes 132a, 132b, be attached by nuts and bolts 134a, 134b, 134d, 134f, also a single ball bearing is spaced between gear bracket 126 and crown gear 129b respectively.

the depicted of embodiment of Fig. 1I the construction of the lift table 10 includes a flat loading surface or deck 11 may be made from wood, steel, fiberglass with or without rough surface. The deck 11 is support by a plurality of cross bar 17, 41, 19a 19b and 19c. longitudinal support frame 17a, 17b, and brackets 55a, 55b, provided with holes 200a, 200b, 200c, 200d, located between cross bar 19a and 41. the platform secure by pin 221 and secure bracket 220 welded on upper cross bar 42b near upper portion of scissor leg 15a. the deck 11 are provided pockets 403a, 403b, 403c, 403d for stepladder 400a and pockets 405a, 405b, 405c, 405d, for rails 420a, 420b, also provided holes 601a, 601b, for head support 600. (403a, and 403b, can be use for buget 500.

the lift table 10 includes a pivoted combination support plate and approach ramp 49 Figs. 1J, 1L, 1M, 1T, can be removed from support plate channel or front cross bar 43 by pressing on support plate lock 61 is mounted by bolt 60 cause the spring 68 to collapsed then removed the support plate 49. On both the support plate 49 included support plate rod holder 63a, 63b, be attached by clamps 64a, 64b, and welded to support plate 49 also stop 66a, 66b, welded to support plate 49 and spring 65, a 65b, are spacing between rod 63a, 63b, and stop

66a, 66b, to remove support plate 49 completely from support channel 43 then press rods 63a, 63b, and remove from support plate channel slot 69 Fig.1J. the support plate 49 can be swung upwardly when the lift table 10 is being transported or stored, the support plate 49 can be lowered, for engagement with the floor or dock Fig.1T, 3A, the lift table 10 can be suspended in its lowered position by engagement with a stop 70 or shoulder welded to support plate 49 in Fig. 1T, 3A, the support plate 49 can be raised in to the elevated position and lock in to support plate channel 63 as seen in Fig.1B also can be used as standard hand truck two-wheeler or tilt-back six-wheeler when support plate 49 was locked in channel 43 Fig.1A, 1I, 1M, the support plate 49 is available in different sizes and some make for work buget (not shown).

In the embodiments depicted in Figs. 1N and 1O a combination extend legs and reinforce legs with wheels assembly are provided for coupling to the lift table 10 by extend legs 72a, 72b, 72c, 72d, by inserting in lower end of scissors legs 15a, 15b, 15c, 15d, Respectively. The lower end of scissors legs also included with adjust-stop pin and holes 81a, 81b, 81c, 81d, for adjusting high to extended legs 72a, 72b, 72c, 72d, and provided with holes 80a, 80b, 80c, 80d 80e, 80f, 80g, on each of the extended legs.

In Figs 1N, 1O, cross bar 73a, are coupled by welding to wheels support shaft mounted to wheels members 75a and 75b, (only cross bar 73a equipped with wheels). cross bars pockets 74a, 74b, 74c, 74d, coupled by welding on top of cross bare 73a, 73b, pockets 74a, 74b, 74c, 74d, included locking pins and holds 77a, 77b, 77c, 77d, then inserted upper cross bars with extend legs 72a, 72b, 72c, 72d, to pockets 74a, 74b, 74c, 74d, and press locking pins 77a, 77b, 77c, 77d, to seated in holes 79a, 79b, 79c, 79d, to locked cross bar 73a, 73b,. the extend legs 72c, 72d and cross bar 73b when attached together can be used as a stop help prevented the table 10 rolling away also can be extend in order to elevate one end of the lift table 10 is provide an incline roller for fast load and unload.

In the embodiments depicted in Figs.1P, 1Q, the swivel wheels assembly 16A, 16b, are located on both side of lift table 10 which included bracket 90A, 90b, 91A, 91b, and hub 86A, 86b, are welded together as shown, with shaft 85A, 85b, welded to scissor leg 15B, 15c, and mounted to hub 86A, 86b, and wheels 84A, 84B, 84c, 84d, mounted to bracket 90A, 90b, using nuts 88A, 88B, 88c, 88d, and bolts 87A, 87B, 87c, 87d, (the swivel wheels help cut down on weight instead of using lower frame with wheels assembly) also wheels may made of rubber alike or steel. The swivel wheels assembly 16a and 16b can be rotate 180 degree to provide a stop prevented the table 10 rolling away.

In the embodiments depicted in Fig. 1R, 1S, a pair of pivot pins 12a, 12b, (12b shown in Fig.1D) are center of hinges 102a, 102b, and welded to lower portion of scissor legs 15a, 15d, and pivot pin 12a, 12b, are welded to the lower portion of scissor legs 15b, 15c, bolted by nuts 104a, 104b, caused the pivot axis to be at lower potion of scissor leg provided the space for extend legs 72a, 72b, 72c 72d, make it possible to insert in square tube or reinforced the scissor legs 15a, 15b, 15c, 15d,.

In the embodiments depicted in Fig. 2A, 2B, the rear lift table cross bar 41 mounted at bracket 55 pin 54 to extended is pivotally at one end to rod 50 extensible tilter device 40 (Fig. 1E) rested on bracket 51b, pin 53b and cross bar 42b, the upper end of scissors legs 15a, 15d,

(Fig 1A, device 40 rested on cross bar 42a). when the lift table 10 raised the angle of support plate 49 and deck 11 rotate forward and upward at the time which defined by the angle and extended of device 40 by selected holes 200a, 200b, 200d, 200d, on bracket 55a, 55b, (D200 is tilting or decline more than A200) or adjusting locking pin 52 .also the extend leg can be used as tilter device or incline device.

In the embodiments of Figs. 2C, 2D, 2E, 2F, are side view of tilt-back six wheeler, two wheeler hand truck and elevation of lift table showing use thereof, as it used to loading and unloading box 200 from truck bed 201.

Fig. 2C, showing the device lifting and transporting box 200, from truck bed 201. Fig. 2D, showing the device transformed to tilt-back six-wheeler position to standard two-wheeler also transferred weight box 201 to truck bed 200, used safety lock 202 is attach to truck bed set to prevent the support plate sliding away or tilting back ward. Fig. 2E, showing the lift table is extended scissor legs and wheels 16a, 16b, 18a, 18b, also transformed platform 10 back to tilt-back position will rest on support surface, released safety lock 202, stepped on cross bar 42a, (on heavier load to prevented the lift table 10 tilting use extending legs 72a and 72b with cross bar 73a move forward pass center gravity of load) moved lift table 10 away from truck bed 200 and lowering the lift table 10 to tilted back position the lift table 10 is secured in the desired angle. Fig. 2F showing the lift table lowered and in transporting. To load box 201 or lift table 10 on truck 200 reverse the procedure(2F, 2E, 2D, 2C,).

In the embodiment depicted in fig. 3A, shown in the lift table 10 lowered to the floor level, the support plate 49 be removed from support plate channel 43 and lowered, for engagement with the floor (can be seen in Fig. 1T), the extensible tilter bar 40 attached to hand crank pusher wheel 48 Fig. 3C, with locking pin 302 and mounted to bracket 44, with locking pin 303 or locking pin 53a (bracket 51) in such a manner that cranking the extensible bar 40 caused the lift table 10 and support plate 49 moved forward in relation to the floor and be able to lift many stag of boxes 301 in one pass. In the embodiment of Fig. 3B, shown in the lift table 10 in an elevated position ready to tilting and unloaded boxes 301 such as near a truck or van, an elevated loading dock, tilting table or loading pallet with out equipped with forks device.

In the embodiments depicted in fig. 3A, 3C, hand crank pusher wheel is comprised of wheel 310 welded one side to center of gear 309 and attached to wheel support 311 by locking pin 303. On upper portion of wheel support 311 are provided with pocket 320 hole 316 and locking pin 321 to attach extension 40. A pair of springs 318a, 318b, are hooked to lower edge of select lever 314 by hole 319 and the opposite end is hooked to one way push mechanism 312. Both end are hooked to holes 317a, 317b,. The wheel support 311 is provided with pivot pin 313 attaches to one way mechanism 312 and pivot pin 315 to select lever 314, below pivot pin 315 is provided with pin stop select lever 340. When push the select lever 314 to the left it will cause the spring 318a to pull the one way push mechanism 312 to tilt and lower the right side which locking on gear 309 in such a manner that when cranking the extension 40 to the left causes the wheel 310 to rotated clock wise in one way to reverse push the select lever to the right side and crank extension 40 to right.

In the embodiment depicted in Fig. 3D shown in the hand truck usage condition or standard two wheeler. The support plate 49 locked in channel 43. this achieves a minimum width thereof between the rearward surfaces of the wheel member 18a and 18b witch can be stored in a

minimum amount of space also can be stored in car trunk or used in side home and transform to step ladder Fig.4A, scaffold Fig.4B, 2A, 2B,.

In the embodiments depicted of figs.4A and 4b the lift table 10 is used as a multi-purpose scaffold and stepladder position. A stepladder 400a is coupled to the lift table 10 by coupling end 402a, 402b insert in the upper deck pockets 43a, 43b and 43c, 43d stepladder 400b is coupled to the lift table 10 by coupling end 402d, seen in 1I and 1T are inserted in support channel 43 then rotated the swivel wheels 16a, 16b, 180 degree used as floor stop set to prevent roll away also the ladders 400a and 400b can be stored below the platform assembly Fig. 4B, the lift table 10 is used as multi-purpose scaffold position, with the extended legs 72a, 72b, 72c, 72d, inserted to scissor legs 15a, 15b, 15c, 15d and cross bar assembly 73a, 73b, are attached to extended legs (Fig.1N, 1O,). A pair of hand rails 420a, 420b, couple to the lift table 10 by coupling end 404a, 404b, 404d, 404e, insert in upper deck pockets 405a, 405b, 405c 405d, respectively shown in 1I.

The device can be used in a number of functions, as a portable loading dock, for overhead maintenance or repair, for lifting load, tools, lumber. The operator may stand on the deck and ride it up to the proper elevation, either under the control of an assistant or control by the operator as he rides (re mode control device not shown). the deck can be tilting parallel to ceiling, roof, pole or work piece for more convenient when repair. Another possible use is telescopic supports in sure adaptation to any standing surface contour. Extensible and retractable climb-through apertures at the end of the platform permit safe access to the scaffold movement surface.

In the embodiments depicted of figs 5A, 5B, the buget 500 is coupled to lift table 10 by coupling brackets 502a, 502b, welded to both side of the buget, and inserted in upper deck pockets 403a, 403c, and bolted by 503a, 503b, to the front edge of buget 500 is welded with bracket 501 (Fig.1K,1L,) and inserted to support plate channel 43 locking by locked 61.

Can be operate or function similar to Fig.2A, 2B, fig 5b can be elevated and load or unload to the truck bed .Work buget allow you lower to the floor level, and let you low load on an off. Design to position containers with part within fingertip reach of assembly line workers and machine operator also eliminate bending and stretching required to remove component from deep basket and boxes.

In the embodiments depicted of figs 6A, 6B, the lift table 10 is lower to the floor level, the head rest 600 is coupled to platform 10 by coupling pin 601a, 601b, inserting in hole 601a, 601b, to upper deck. mechanic's creeper work as seat supports a worker an upright or set the tool box at the same time also elevate tool box at desire level for work condition, convenient with remote control and useful for business and home. Can be incline support worker when working face down position to reach where it's hard to get and easy to adjusting high when you work.

In the embodiments of Fig. 6C, 6D, the lift table 10 is used as a multi-purpose floor jack position. Fig.6c, shown the lift table ten is lowered to the floor level, the extension 610 is insert between lift arm 32b and using top portion of the extension 610 to elevated and lifting at frame of vehicle or can be remove the lift arm 13 from bracket 34c and 34d by remove pin 611 from ball joint shaft. A floor jack of the type typically employed for automotive repair work which can load unload automotive parts, spare tires, raise and align the vehicle at the same time also portable, foldable, and light weight can fit in car trunk.